

Progress Report

During the period of September, 1977 to the present most aspects of the research proposal have been examined. Several studies were designed to examine the rate of glucocorticoid metabolism under stress. In one study the uptake of corticosterone was investigated under normal and stressful condition. The establishment of corticosterone circadian rhythm was studied and related to the response to some cholinergic and anticholinergic drugs in the immature rat in another experiment. In a third experiment the role of histamine antagonist agents (H_2 Antagonist) on corticosterone level was investigated under normal and stressful condition. In another study was designed to examine the effect of colchicine on corticosterone release under normal and stressful conditions.

Using NASA Support the PI was able to publish more than fifty articles in refereed indexed journals. (Please see enclosed list and to publish more than hundred abstracts. More than twenty students (sixteen of them were African American) were trained using NASA grant.

PUBLICATIONS

A. Books

1. Walker, C.A., C.M. Winget and K.F.A. Soliman, Chronopharmacology and Chronotherapeutics, Florida A&M University Foundation, Tallahassee (1981).

B. Articles

1. Clausell, D.C. and K.F.A. Soliman, Ovarian Serotonin Content in Relation to Ovulation, *Experientia* 34, 410-411 (1978).
2. Soliman, K.F.A. and T.M. Huston, Inhibitory Effect of Serotonin on Ovulation in the Domestic Fowl, *Gallus Domesticus*. *Animal Repr. Sci.* 5, 510-515 (1978).
3. Okonmah, A.D. and K.F.A. Soliman, CNS Stimulation Effect on the Sexual Maturation of the Female Rat. *Experientia* 34, 1238-1239 (1978).
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6. Pinkston, J.N. and K.F.A. Soliman, Effect of Light and Feeding Conditions on the Circadian Rhythm of Ethanol Metabolism. *J. Interdis. Cycl. Res.* 10, 185-193 (1979).
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18. Soliman, K.F.A., Peripheral Regulation of the Adrenal Cortex In Progress in Research and Clinical Application of Corticosteroids, Lee, H.J. and T.J. Fitzgerald (eds) Hyden and Son, Inc., Philadelphia, pp. 177-192 (1982).
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C. Abstracts

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